In August, 2017, the Health Impact Project, a collaboration between the Robert Wood Johnson Foundation and Pew Charitable Trusts released a report: Ten Policies to Prevent and Respond to Childhood Lead Exposure. The Trust for America’s Health, National Center for Healthy Housing, Urban Institute, Altarum Institute, Child Trends and many researchers and partners contributed to the report.

Lead poisoning is devastating for children and can lead to lifelong problems, including decreased IQs and poor academic performance. Even at very low levels, lead exposure affects impulse control and the ability to grasp information, making children more likely to struggle in school, drop out, get into trouble with the law and, later, underperform at work.²

The report notes that 500,000 children in the United States, ages 1 to 5 years, had elevated blood lead levels according to the most recent data from the Centers for Disease Control and Prevention (CDC).³ While every child can be at risk and no level of lead in blood is safe,⁴ the most affected are children of color and those living in low-income communities. According to a 2011 U.S. Department of Housing and Urban Development (HUD) study, 28 percent of African-American households and 29 percent of poorer households faced home lead exposure risks compared with 20 percent of White and 18 percent of more affluent families, respectively.⁵

* Cost data are not available for all the interventions that contribute to total prevention of lead poisoning. However, cost-benefit ratios are provided in the report for several strategies, including lead water line replacement, lead paint eradication, and lead-safe renovation and repair practices.
Lead-based paint and the contaminated dust it generates in homes and soil represent one of the most dangerous and widespread sources of exposure afflicting children. Nationwide, about 23 million homes—one out of every five—in the United States have lead paint, peeling paint, contaminated dust or toxic soil that exceed federal standards. About 3.6 million of these residences house young children, with nearly a third of those coming from low-income families. Some of the reasons for the prevalence of exposure from lead paint include:

- **Older Homes.** More than half of homes built before 1978 have some lead-based paint. If constructed before 1960, that number jumps to 76 percent and 86 percent of homes built before 1940 have lead paint.
• **Children Being Children.** Lead dust settles inside on floors and outside on the ground, both areas where young children spend a lot of time. Upping the risk: children often put their hands in their mouths after touching things.\(^\text{10}\)

• **Rent vs. Own.** Low-income families are more likely to rent than own their home.\(^\text{11}\) And, renters are more likely to face issues associated with inadequate housing, such as lack of complete plumbing facilities in the unit, have more serious constraints on funding for improvements, and depend on landlords to make their homes lead-safe.\(^\text{12}\)

• **Many Cases, Same Address.** Most state and local laws permit property owners to re-rent units where a child has gotten lead poisoning, without removing or repairing the lead hazards. For example, in Chicago, 67 high-risk buildings contributed to 994 cases of high lead levels.\(^\text{15}\) States could prevent this by requiring landlords to fix lead hazards before re-renting a unit and mandate inspections for all units in a building where one is found to have lead hazards.\(^\text{16}\)

• **Fear.** Many homes go uninspected for lead because people fear the outcome. Afraid that they could be evicted, many renters do not raise lead hazards with their landlords. Homeowners worry that a positive lead test will devalue their property. Landlords fear lawsuits, even when the property was not found to be the primary source of exposure.\(^\text{17}\)

• **Unsafe Renovation Practices.** Residential remediation is the primary strategy for preventing chronic exposure to lead dust, yet, at the same time, renovation, repair, and painting activities in older homes are also a major source of lead exposure. Unsafe and unregulated remodeling and renovation of older housing that contains lead-based paint pose significant hazards that can increase children’s blood lead levels by as much as 69 percent.\(^\text{20}\)

### Windows have the highest levels of lead paint and dust compared with other building components, and replacing windows with lead paint has been shown to deliver large, sustained reductions in dust lead levels, including on floors that children are likely to contact more frequently.\(^\text{13}\)

One barrier to replacing old windows coated with lead paint is provisions of the National Historic Preservation Act, which along with state and local rules, restricts replacement of features such as windows, in historic homes.\(^\text{14}\)

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#### Re-renting units in high-risk buildings in Chicago leads to multiple cases of high lead levels per building

![Image](image_url)

**994 cases** from 67 high-risk buildings

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**New York City** has a system to identify potentially unsafe renovations and intervene to prevent lead exposure. Health department inspectors who observe uncontained paint dust or debris must take samples and stop the work. Owners or contractors must then post a “conspicuous” sign with a phone number to access additional information, including inspection results, until they have completed cleanup and undergone additional inspections to confirm that the source of potential lead exposure has been addressed.\(^\text{18}\) When contractors resume work, they must follow safe work practices that contain and minimize dust.\(^\text{19}\)

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At about $10,000 per unit, lead-paint hazard control is unaffordable for many low- and middle-income Americans.\(^\text{21}\)
Among the Report’s 10 Policy Priorities:

Remove lead-paint hazards from low-income housing built before 1960 and enforce the federal Renovation, Repair and Painting (RRP) Rule.

The primary federal law concerning lead-paint hazards in housing is the Residential Lead-Based Paint Hazard Reduction Act, enacted in 1992. Key features of the act include:

- Authorizing the HUD lead hazard control grant program, which is the federal government’s primary means of assisting homeowners with control efforts. The program makes up less than 0.3 percent of the department’s budget.
- Creating a certification system for individuals and businesses performing lead control activities.
- Requiring either interim controls or lead abatement for federally owned and assisted housing, such as public and military housing.
- Establishing the federal lead disclosure rule, which requires property owners to reveal any known lead paint hazards to prospective buyers or tenants before a property is sold or rented.
- Defining existing lead-based paint in housing as containing 5,000 ppm of lead or 1 mg/cm².
- Requiring EPA to publish standards for lead in dust and bare soil at residential properties.

Residential remediation is the primary strategy for preventing chronic exposure to lead dust. But renovation, repair and painting activities in older homes, where paint is often lead-based, are also a major source of lead exposure. Safe work practices are essential for avoiding exposure to highly toxic dust, debris and fumes.

Unsafe and unregulated remodeling and renovation of older housing that contains lead-based paint pose significant hazards that can increase children’s blood lead levels by as much as 69 percent. A 2013 study of 276 children ranging in age from 6 months to two years whose housing underwent interior renovation had mean blood lead levels at two years of age that were 12 percent higher than children whose homes were not renovated.

Studies have found that work done by parents and other do-it-yourselfers has been a factor in children’s high blood lead levels. For example, in 2006-07, a review of case records of children in New York State revealed that 14 percent of children with blood lead levels at or above 20 µg/dL lived in homes that had recently been renovated. Notably, residents performed 66 percent of these renovations, suggesting that, while preventing unsafe work by contractors is important, educating homeowners and renters about proper renovation practices is also critical.
Federal Level Policy Recommendations:

**Removing Lead-paint Hazards from Low-income Housing Built Before 1960.**

- HUD, the U.S. Environmental Protection Agency (EPA) and the Centers for Disease Control and Protection should work with states and local governments to replace windows coated with lead paint, fix peeling paint, clean up contaminated dust and treat toxic soil in and around low-income homes built before 1960. HUD should also make sure that these homes remain affordable.

- The U.S. Department of Energy should encourage the replacement of lead-painted windows with new energy-efficient ones by including the benefits of preventing lead exposure under its Weatherization Assistance Program (WAP).30

- Centers for Medicare & Medicaid Services (CMS) and Title V Maternal and Child Health Services Block Grant Program should train home healthcare workers and other home-based aides to identify potential lead hazards in houses with children.

- EPA and state and local governments should offer funding to schools and child-care providers to support lead paint hazard identification and mitigation.

- EPA should update its standards for lead paint, dust and soil and work with state and local governments to fund efforts to identify and mitigate lead-paint hazards in schools and child-care facilities.

**Enforcing the Renovation, Repair and Painting Rule.**

EPA should use their power to regulate over 4 million renovation jobs each year and work with states and local agencies to ensure compliance.31 The agency should require that contractors perform dust testing after completing work to make sure that the home is safe.

EPA should fund state and local agencies to support compliance and educate businesses and consumers about the hazards of unsafe renovation.

The Occupational Safety and Health Administration (OSHA) should enhance protections for workers and their children by updating standards for lead exposure to reduce on-the-job risks and the hazards of bringing lead home from their jobsites.
State Level Policy Recommendations:

Removing Lead-paint Hazards from Low-income Housing Built Before 1960.

- States should require housing inspections and the repair or removal of lead-paint hazards before a home is sold, rented or financed.
- State governments should make lead-paint hazard control financially accessible by offering low-interest loans, tax credits and incentives to property owners.
- States could prevent repeat-offender units by requiring landlords to fix lead hazards before re-renting a unit and mandating inspections for all units in a building where one is found to have lead hazards. By one estimate, the increased demand for inspection and abatement would create 50,000 to 75,000 jobs that could be given to low-income residents of the high-risk communities. 34
- States and the U.S. Department of Energy should encourage lead-painted windows to be replaced with energy-efficient models.
- State Medicaid agencies should pay for state health department environmental hazard testing of homes in high-risk neighborhoods. States should establish additional permanent sources of funding, other than Medicaid, for lead testing when affected children are ineligible for other state or federal funds.
- States should require school districts and child-care facilities to identify and remediate lead-paint hazards.

Massachusetts’ lead law requires that any property built before 1978 and occupied by a child under six be “deleaded” by removing or covering lead paint hazards. 38 To help homeowners pay for abating lead hazards, including replacement of windows, Massachusetts offers income tax credits of $500 to $1,500, depending on a property’s needs, and administers a series of loan programs to support compliance with the law. 36 Massachusetts also imposes surcharges on the annual fees of certain professional licenses, including real estate brokers, property and casualty insurance agents, mortgage brokers and lenders, small loan agencies and individuals who perform lead inspections. The collected revenue is deposited into the Lead Paint Education and Training Trust Account for use by the state’s Department of Public Health. In 2015, testing found that 591 Massachusetts children younger than six had elevated blood lead levels, compared with 3,095 in 2001. 37

Often multiple cases of lead poisoning are tracked back to the same address. A study found that Massachusetts and Ohio, 32 which mandate inspection and treatment of units with hazards, were 79 percent less likely than Mississippi, which lacks such a requirement, to have residential addresses that repeatedly contributed to high lead levels in children. 33
Enforcing the Renovation, Repair and Painting Rule.

States and their EPA agency partners should ramp up investigations to make sure that contractors meet federal regulations and have the proper training and certification to minimize lead dust and debris. EPA supervises compliance with the rule through its 10 regional offices. EPA is responsible for enforcement in 36 states and has delegated this authority to 14 states.

States should apply for EPA funding to support compliance with the RRP Rule, including educating businesses and consumers about federal requirements and the dangers of unsafe renovation. And, states and EPA should emphasize enforcement for work at child-care facilities and housing built before 1960.

Rhode Island and the District of Columbia require proof of appropriate EPA-compliant lead-remediation training before issuing a permit for work that is likely to disturb paint in housing built before 1978.
Local Level Policy Recommendations:

Removing Lead-paint Hazards from Low-income Housing Built Before 1960.

- Local laws should require housing inspections and removal of lead-paint hazards, including peeling or chipped paint and contaminated soil and dust, before a home is sold, rented or financed. Units in which a child was poisoned or a lead hazard exists should not be re-rented until the lead contamination has been removed.

- City and town governments should make lead-paint hazard control affordable to property owners through low-interest loans, tax credits and other incentives.

- Local governments, with EPA and states, should offer funding to schools and child-care providers to support lead-paint hazard identification and mitigation.

Enforcing the Renovation, Repair and Painting Rule.

Communities should require proof of EPA-compliant lead-remediation training before issuing a permit for work likely to disturb paint in housing built before 1978. They should widely distribute information about the rule’s requirements.

Using EPA funding, local agencies should educate businesses and consumers on the perils of unsafe renovation.

Experts describe Rochester, New York’s, 2005 law requiring regular inspections of most pre-1978 rental housing for lead-paint hazards as part of the city’s certificate of occupancy process for most rental properties as the smartest in the nation. In the decade-plus since it was created, the city has inspected more than 141,000 homes and the number and proportion of children with high blood lead levels has decreased. In 2004, 900 children tested for lead in Monroe County had levels above the CDC’s action level at the time of 10 µg/dL compared with 206 children in 2015.

The District of Columbia prohibits lead-based paint hazards in housing, multifamily property common areas and daycare and prekindergarten facilities constructed before 1978. Before a buyer or tenant is obligated under contract to buy or lease a unit, the property owner must prove no lead-based paint hazards were present within the past 12 months. Owners who discover lead-based paint in their properties must disclose it to their tenants within 10 days.

To identify potentially unsafe renovations in New York City, health department inspectors who observe uncontained paint dust or debris must take samples and stop any remodeling or construction work. Owners or contractors must then post a “conspicuous” sign with a phone number to access additional information, including inspection results, until they are cleaned up and re-inspected to confirm that the source of potential lead exposure has been addressed.

Providence and Pawtucket, Rhode Island, will not issue permits for construction work at homes and child-care facilities without proper certification.
Conclusion
Childhood lead poisoning is preventable.

With targeted resources and interventions, blood lead levels have declined dramatically over the past few decades.

Lead-based paint and the contaminated dust it generates in homes and soil, represent one of the top dangers and sources of exposure to children. Remediation of more than a million older, low-income homes in the United States will take time. Meanwhile, preventative housing inspections can help identify hazards before a child becomes sick and compel property owners to fix hazards promptly. Another vital step is educating contractors and do-it-yourselfers on safe practices, and, when necessary, making sure they have the proper training and certification.

While successful policies over the past few decades have removed a significant amount of lead in places where children live, learn and play, children of color and those living in low-income communities with aging infrastructure suffer the most. There is an urgent need for continued attention and action to protect these, and all, children from lead paint’s harmful effects.
Endnotes


9 40 CFR 745.223.


29 Franko et al., “Children with Elevated Blood Lead Levels.”


43 D.C. Official Code § 8-231.01 et seq.

44 “Regulation of Lead-Based Paint Activities,” D.C. Municipal Regulations and D.C. Register.


